

Appl. No. 10/014,676
Amendment After Final dated January 30, 2007
Reply to Final Office Action of November 30, 2006

Remarks/Arguments

Claims 1-21 are pending and stand rejected on varying grounds under § 103(a).

No Claims have been amended. No new matter has been added by any amendments.

In view of the comments below and the number of errors in the indicated rejections and arguments, Applicant respectfully requests that the Examiner reconsider the present application including claims 1-21, withdraw the rejection of these claims, and move this application to allowance or in the alternative reopen prosecution.

Applicant is appreciative of the obvious efforts that have been extended in searching and examining the present application.

a) Claims 1-2 and 6 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dehner, et al (US Pat. No.6,882,677 B2) in view of Bahl, et al. (U.S. Pub. No. 2003/0223469 B1) in view of Gwon, et al. (US Pub. No. 2003/0016655 A1).

Claim 1 is in independent form with claim 2 and 6 dependent thereon.

Dehner et al was issued on April 19, 2005 and filed on February 28, 2001. Bahl et al was published on November 11, 2004 and filed on June 17, 2004 as a Continuation of 09/954,087 which was filed on September 17, 2001. Gwon et al was published on January 23, 2003 and filed January 29, 2001. The present invention was filed on December 11, 2001. Thus these references qualify as prior art, if at all, only if the reference qualifies as prior art under 102(e). Section 102(e) recognizes that (1) publications of applications by another under section 122(b) that are filed before the invention by applicant as well as (2) patents granted on an application for

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patent by another filed in the US before the invention by the applicant may preclude granting a patent to applicant. Applicant is investigating whether these respective references were filed prior to the invention by the Applicant and reserves the right to file an appropriate Declaration regarding conception and due diligence, if needed.

The Examiner cites Dehner et al. in the rejection of claim 1. Claim 1 defines an approach for communicating in and around a localized wireless coverage area with specific features speaking to what happens when communication is established via a wide area network when the source mobile subscriber is outside a neighborhood cell and subsequently determines that a neighborhood cell is available and that the source unit is a subscriber, i.e., a handoff from the wide area network to the ad hoc wireless network is undertaken. Dehner et al speaks only to handoffs from one NAP to another NAP and never discusses a handoff from a wide area network to a local area or ad hoc network. The only mention of a wide area network made by Dehner et al is noting that such networks have included handoff provisions (see col. 4, lines 55-56). Thus Applicant respectfully submits that Dehner et al is not a relevant reference and thus not a proper reference for a rejection of pending claim 1.

Furthermore, with reference to claim 1, the Examiner maintains that "Dehner et al. discloses defining a neighborhood cell by transmitting a localized wireless coverage area-identifying signal (see col. 8, lines 53-58) (see col. 1, lines 13-30, Wireless LANs (WLANs) such as Bluetooth, Home RF, 802.11, ...these networks are designed and constructed to provide adhoc wireless network... .Essentially, in part to keep the networks simple and inexpensive, provisions for mobility management, such as handoff from one coverage area to another that may be

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considered and present in and associated with wide area networks (WLANs) such as cellular phone systems have not been included in WLAN) (see col. 4, lines 55-56);”

Applicant respectfully disagrees and notes that Dehner et al discusses an ad hoc network discovery scheme. According to Dehner et al “... the slave [communication unit] will broadcast an inquiry sequence and the master [NAP] will respond with a message indicating supported services and an ID (col. 3, lines 45-47). The slave then completes a service access routine.” In Applicant’s view this is different than transmitting a signal that identifies a localized wireless coverage area for a neighborhood cell all as claimed since the NAP would have to broadcast this signal.

The Examiner continues, alleging that Dehner et al shows or suggests “... Establishing communication between a source mobile subscriber unit (see col. 2, lines 60-67) and a destination unit when the source mobile subscriber unit is outside of the neighborhood cell (see col. 3, lines 1-5); receiving the localized wireless coverage area identifying signal (see col. 4, lines 55-56, discover other NAPs and exchange their respective IDs); switching over to ad hoc wireless network coverage when the source mobile subscriber unit enters the neighborhood cell to maintain the communication between the source mobile subscriber unit and the destination unit (col. 8, lines 3-5, communication continues and time seamless)”

Applicant respectfully disagrees noting that in Dehner et al, the source mobile subscriber unit never switches a communication on a wide area network over to ad hoc wireless network coverage as this subscriber unit is always on the ad hoc network and merely switches from one NAP to another NAP via the processes, etc. disclosed (see abstract among other passages, FIG. 7; 703, 709, 713). The Examiner concedes as much noting “... Dehner et al. is silent to disclosing

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if the establishing of communication between a source mobile subscriber unit and a destination unit is achieved through wide area network coverage when the source mobile subscriber unit is outside of the neighborhood cell, switching over to ad hoc wireless network coverage.”

The Examiner then alleges that “... Bahl et al. discloses a system of communicating in and around a localized wireless coverage area (see figure 2, page 4, [0031], switching over);” Applicant submits that Bahl et al. shows and discusses throughout the specification an infrastructure (IS) or managed network mode and a peer to peer or ad hoc (AH) mode (see [0002], [0003], [0007] ...). The IS and AH network modes are the classic types of arrangements for a local area IEEE 802.11 based system as is evident to one of ordinary skill. The Examiner is correct with the assertion that Bahl et al discloses a system of communicating in a localized wireless coverage area and in fact in Applicant’s respectfully considered view, that is all that Bahl et al is suited for doing since the Bahl et al system is based on IEEE 802.11 and the communicating unit (laptop 220) merely switches between IS (infrastructure based local area network communication via link 225 with access point 215) and AH (an adhoc based local area network communication via link 235 and handheld device 230) modes in a localized wireless coverage area. This is a clear and important distinction between Bahl et al and the present invention.

The Examiner continues and alleges that Bahl et al. shows or suggests “Establishing communication (see figure 2, 225) between a source mobile (see figure subscriber unit (see figure 2, laptop computer 220) and a destination unit (see figure 2, access point 215); If the establishing of communication between a source mobile subscriber unit (see figure 2, laptop computer 220) and a destination unit (see-figure 2, access point 215) is achieved through wide

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area network coverage when the source mobile subscriber unit is outside of the neighborhood cell, switching over to ad hoc wireless network coverage when the source mobile subscriber enters the neighborhood cell (see figure 2, WAN 255, IS mode) (see col. 4, [0030], to communicate with the wireless nodes in the AH mode, the dual-mode node switches over to the AH mode. When communicating with another IS wireless node or the wired portion of the IS network, the dual-mode node switched back to the IS mode) (see page 5, [0041], the switching of the wireless network mode is triggered by poll signal broadcast by an access point of the IS network. In response to the poll signals, the wireless network driver will disable one of the virtual IS and AH mode of operation and enable the other) (see page 1, [0006], when it later wants to function as a node of the infrastructure network, it then has to exit the ad hoc network and reconnect to the infrastructure network);”

Applicant notes that the Examiner construes Bahl et al and the laptop 220 as the source wireless unit and access point 215 as the destination unit. The Examiner cites WAN 255 (Internet) and [0030] in support of the view that if communication is established via the WAN it is switched over to ad hoc network coverage when the source mobile unit enters the neighborhood cell. Applicant notes that WAN 255 is not used for communication between the laptop 220 (source) and access point 215 (destination) and furthermore, that whatever means is used for this communication there is no switching of that means. Applicant agrees that laptop 220 in Bahl et al is suited to switch between the IS and the AN mode as needed [0030], however this is not and does not suggest the claimed operation of “if the establishing of communication between a source mobile subscriber unit and a destination unit is achieved through wide area network coverage when the source mobile subscriber unit is outside of the neighborhood cell,

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switching over to ad hoc wireless network coverage when the source mobile subscriber unit enters the neighborhood cell to maintain the communication ...”

The Examiner’s allegations continue with “If the establishing of communication between a source mobile subscriber unit (see figure 2, laptop computer 220) and a destination unit (see figure 2, the access point 215) is achieved through the ad hoc wireless network (see figure 2, the ad-hoc network 280) coverage when the source mobile subscriber unit is within the neighborhood cell (see figure 2, the ad-hoc network 280), switching over to the wide area network coverage when the source mobile subscriber mobile unit exists the neighborhood cell (see page 4, [0030], to communicate with another IS wireless node or the wired portion of the IS network, the dual mode node switched back to the IS mode) (see page I, [0006], when it later wants to function as a node of the infrastructure network, it then has to exit the ad hoc network and reconnect to the infrastructure network).”

Applicant respectfully disagrees with the Examiner’s allegation noting that the link 225 between laptop 220 and access point 215 is always using an IS mode and this link or communication between the laptop 220 (source) and access point 215 (destination) never changes according to Bahl et al. Again, Applicant agrees that laptop 220 does change logical operation between an IS mode to communicate with access point 215 and an AH mode to communicate with handheld device 230. This however is not and does not suggest (Bahl et al taken alone or together with the other references) the claimed “if the establishing of communication between a source mobile subscriber unit and a destination unit is achieved through the ad hoc wireless network coverage when the source mobile subscriber unit is within

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the neighborhood cell, switching over to the wide area wireless network coverage when the source mobile subscriber mobile unit exits the neighborhood cell to maintain the communication

Applicant does note that laptop 220 may include an embodiment of the computer 110 (fig. 1) and Bahl et al does suggest [0025] that laptop 110 can use a WWAN, e.g., a 2.5G wide area network, however there is no teaching in Bahl et al about switching a communication established in a wide area network to a neighborhood cell or vice versa given the claimed circumstances.

The communication over link 225 is not the communication over link 235 and the communication over link 235 is not with the access point 215.

The Examiner continues and in Applicant's respectfully considered view given the comments above, erroneously concludes that "Bahl recognizes if the establishing of communication between a source mobile subscriber unit and a destination unit is achieved through wide area network coverage when the source mobile subscriber unit is outside of the neighborhood cell, switching over to ad hoc wireless network coverage when the source mobile subscriber unit enters the neighborhood cell; and if the establishing of communication between a source mobile subscriber unit and a destination unit is achieved through the ad hoc wireless network coverage when the source mobile subscriber unit is within the neighborhood cell, switching over to the wide area wireless network coverage when the source mobile subscriber unit exits the neighborhood cell. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Dehner with the teaching of Bahl to provide if the establishing of communication between a source mobile subscriber unit and a destination unit is achieved through wide area network coverage when the source mobile subscriber unit is outside of the neighborhood cell, switching over to ad hoc wireless network

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coverage when the source mobile subscriber unit enters the neighborhood cell; and if the establishing of communication between a source mobile subscriber unit and a destination unit is achieved through the ad hoc wireless network coverage when the source mobile subscriber unit is within the neighborhood cell, switching over to the wide area wireless network coverage when the source mobile subscriber unit exits the neighborhood cell in order to access both ad hoc network and wireless network (IS)."

The Examiner concedes "However, the combined system (Dehner - Bahl) is silent to disclosing determining whether the source mobile subscriber unit is a subscriber on the neighborhood cell and if the source mobile subscriber unit is a subscriber, switching over." And then maintains that Gwon et al., among other features shows or suggests "determining whether the source mobile subscriber unit is a subscriber on the neighborhood cell and if the source mobile subscriber unit is a subscriber, switching over (see page 6, [0051], authentication, security process)"

Gwon et al's system is supporting a handoff between IP routers, but the wireless air interface is consistent between router coverage areas in the same way that a cellular subscriber handoffs between base stations using the same cellular air interface. Cellular systems also perform authentication when handing over between cells. But the present claims are referring to a handoff from a cellular air interface to an ad hoc air interface (such as 802.11) and visa versa. This requires validation that the subscriber is allowed to be serviced by a different network each time the handoff occurs and no such teaching is made in Gwon et al.

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Thus and in view of the above discussions it is clear that these three references taken individually or in any combination do not show or suggest all features of claim 1 or any claims dependent on claim 1 (i.e., claims 2-8). Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 1-2 and 6 under 35 U.S.C. 103(a) as being unpatentable over Dehner, et al (US Pat. No.6,882,677 B2) in view of Bahl, et al. (U.S. Pub. No. 2003/0223469 B1) and further in view of Gwon et al. (U.S. Patent No. 2003/0016655 A1).

b) Claims 3-5, 7, and 8 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Olkkonen-Bahl-Gwon) in view of Razavillar, et al. (US Pat. No. 7,009,952 B1).

Claims 3-5, 7, and 8 are dependent on claim 1. As noted above, claim 1 appears to be allowable over the cited references (Dehner et al, Bahl et al, and Gwon et al). Thus at least by virtue of dependency, claims 3-5, 7, and 8 should also be allowable. The Examiner indicates that these claims are rejected based on the combined system of (Olkkonen-Bahl-Gwon) in view of Razavillar, et al. (US Pat. No. 7,009,952 B1). Applicant notes that (Olkkonen-Bahl-Gwon) were not cited to reject claim 1 and thus that this rejection appears to be erroneous on its face. The Examiner is referred to the Response dated September 19, 2006, pages 10-16 for a discussion of these references with respect to claim 1. In any event and presuming the Examiner has erred and intended to cite Dehner et al, Bahl et al, and Gwon et al in support of this rejection, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 3-5, 7,

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and 8 under 35 U.S.C. 103(a) as being unpatentable over Dehner, et al (US Pat. No.6,882,677 B2) in view Bahl et al. (U.S. Patent No. 2003/005481881) and Gwon et al. (U.S. Patent No. 2003/0016655 A1) and further in view of Razavilar, et al., (US Pat. No.7,009,952 B1).

c) Claims 9-10 and 11-12 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dehner, et al (US Pat. No.6,882,677 B2) in view of Bahl, et al. (U.S. Pub. No. 2003/0223469 B1) in view of Gwon, et al. (US Pub. No. 2003/0016655 A1).

Claim 9 is independent in form with claims 10 and 11-12 dependent thereon. Claim 9 defines a method of establishing a packet data route via a wide area network, e.g., cellular network and responsive to excess frame errors via the wide area network, switching over to an ad-hoc network coverage when an appropriate cell is available and authorized (subscription in affect). E.g., when excess frame errors are detected and the unit is near a local coffee shop with ad-hoc coverage, the unit can switch over to the coffee shop ad-hoc system. Claim 9 specifically recites:

“A method of communicating in and around a localized wireless coverage area, comprising:
establishing a data packet route to a destination unit through wide area network coverage;
determining whether a predetermined number of network frame errors have been received subsequent to the establishing of a wide area communication route to a destination unit through a wide area network coverage mode of operation; and
switching over to ad hoc wireless network coverage to maintain the data packet route to the destination unit upon determining that the data packet route is being disrupted and upon entry into a defined neighborhood cell, the switching over further conditioned on receiving a localized wireless coverage area identifying signal and

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determining whether service is available and authorized in the defined neighborhood cell."

Referring to claim 9, the Examiner maintains that "Dehner discloses determining whether a predetermined number of network frame errors (see col. 5, lines 3-5) have been received subsequent to the establishing of a wide area communication route to a destination (see col. 5, lines 3-5, signal quality such received signal strength (RSSI), or bit error rate)" and then contradicts this allegation with "However Dehner is silent to disclosing the establishing of a wide area communication route to a destination unit through a wide area network coverage mode of operation.

The Examiner then alleges that "Bahl discloses establishing a data packet to a destination unit through wide area network coverage (see figure 2, Internet WAN 255); the establishing of a wide area communication route to a destination unit through a wide area network coverage mode of operation (see page 1, [0007]); switching over (see [0031], switching over, claim 7) to ad hoc wireless network coverage upon determining that the data packet route is being disrupted and upon entry into a defined neighborhood cell (see page 1, [0006], when it later want to function as a node of the infrastructure network, it then has to exist [sic] the ad hoc network and reconnected to the infrastructure network); switching over further conditioned on received a localized wireless coverage area identifying signal (see page 6, [0052], [0053]) and determining whether service is available is and authorized in the defined neighborhood cell (see page 1, [0004, authorized)" The Examiner then states "Both Dhner and Bahl disclose the wireless network. Bahl recognizes the establishing of a wide area communication route to a destination unit through a wide area network coverage mode of operation. Thus, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify the system of Razavillar

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with the teaching of Bahl to provide the establishing of a wide area communication route to a destination unit through a wide area network coverage mode of operation in order to access both ad hoc network and wireless network (IS)."

Applicant is confused as to what Razavillar has to do with the present rejection.

Furthermore, and as noted in the discussions above and in stark contrast to the Examiner's construction regarding claim 1, nothing in Bahl et al shows or suggest switching from a wide area network to an ad hoc network.

The Examiner continues with "However, the combined system (Dehner - Bahl) is silent to disclosing switching over to adhoc wireless network coverage to maintain the communication between the source mobile subscriber unit and the destination unit; and when the source mobile subscriber unit exists [sic] the neighborhood cell to maintain the communication between the source mobile subscriber unit and the destination unit."

Gwon et al, see figure 1, discloses the invention provides a way to reduce packet latency, packet loss and packet jitter that result when communications between a mobile node and one or more other fixed or mobile correspondent nodes id dynamically handed-off from one neighboring node to another due to a change in location of the mobile node within the network (see page 3, [0026J, page 5, [0049J, [0050J, page 6, [0053J, page 9, [0084]);: Applicant agrees that Gwon et al shows handing off from one mobile node to another in a wide area network.

The Examiner further asserts that Gwon et al shows "... switching over to ad hoc wireless network coverage to maintain the communication between the source mobile subscriber unit and the destination unit; and when the source mobile subscriber unit exists the neighborhood cell to maintain the communication between the source mobile subscriber unit and the destination unit

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(see page 5, [0049], [0050], As mobile node (MN) 135 reaches intermediary location B and continues toward location C, in order to maintain communication with the network it must identify a new local router and establish a new network link to replace the link with local router R1) (see page 6, [0050], packets transmitted to the home IP address of mobile node 135 will be tunneled by the home area router to mobile node 135 at its new care of IP address); ...”

As noted in a previous response, Gwon discusses a third generation mobile access IP data network [0029] and more specifically an IMT-2000 cellular system [0016], [0036]. As Gwon notes (CDMA, W-CDMA) [0040 - 0041] and as is well known, third generation cellular systems use a single air interface (e.g., air interface between BTS 150 and mobile nodes 135, 140) and data is formed into IP data packets, which are delivered to the IP network via the air interface, specifically cellular traffic channel data frames. Gwon does show or suggest a data packet routed from one unit (mobile node 135) to a destination unit (correspondent node 140). Gwon does discuss handing off a mobile node from one agent to another where these agents may be accessed via different cellular base transmitter sites (BTS) 150 (see FIG. 4 for example). Gwon specifically discusses a cellular handoff from one BTS to another BTS that requires IP data packets to be address reconfigured and routed into the data network using care of address procedures as defined by Mobile IP and IETF RFC 2261 (see FIG. 2, 3 and corresponding discussions [0044-0051]). Gwon discusses a scheme whereby handoffs within a cellular system can be predicted and thus any latency required for the handoff can allegedly be improved (see abstract for example).

Gwon does not show or suggest anything that remotely resembles an ad-hoc network or ah-hoc network coverage or any hand off from a wide area network or cellular network to any

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other network or any other ad-hoc network or vice-a-versa. The Examiner appears to consider a cellular BTS or BTS coverage area as an ad hoc network or ad hoc network coverage and somehow construes a handoff between different cellular BTS as the claimed wide area network to neighborhood cell (ad hoc) and neighborhood cell to wide area network communication switch over. This is clearly an improper construction of the reference and does not comport with the understanding of those of ordinary skill in the field.

Those of ordinary skill know that a BTS is part of a cellular system, e.g., the fixed transmitter that supports the cellular air interface with mobile units. Similarly those of ordinary skill know that ad hoc systems or coverage areas are those where links or connection are "opportunity" based rather than generally pervasive (thus ad hoc). Since the ad hoc systems are not generally available, these systems use different air interface standards and conventions. See the specification, for example, paragraph beginning at page 4, line 14 for further clarification. All that Gwon shows or suggests is a way of doing handoffs in a packet based cellular system that is akin to well known processes for handoffs within known cellular systems.

In view of the above discussion, this assertion even if true does not show or suggest the claimed switching over to ad hoc wireless network coverage ... as claimed. All that Gwon et al shows is hand offs or re-routing of IP messages within a network, e.g., a wide area network from one BTS to another BTS.

Furthermore none of the references show or suggest conditioning the switching over ... as claimed, i.e., conditioned on receiving coverage area identifying signal and determining whether service is authorized on the defined cell.

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Thus this combination of references does not show or suggest taken in any combination all features of claim 9 or at least by virtue of dependency, any of dependent claims 10-15.

Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 9-10 and 11-12 under 35 U.S.C. 103(a) as being unpatentable over Dehner, et al (US Pat. No.6,882,677 B2) in view of Bahl, et al. (U.S. Pub. No. 2003/0223469 B1) in view of Gwon, et al. (US Pub. No. 2003/0016655 A1).

d) Claims 13-15 stand rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Dehner-Bahl-Gwon) in view of Olkkonen, et al. (US Pat. No. 6,842,460 B1).

Claims 13-15 are dependent on claim 9 and claim 9 is believed to be allowable over these references. Thus at least by virtue of dependency, claims 13-15 should also be allowable. Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 13-15 under 35 U.S.C. 103(a) as being unpatentable over Dehner, et al (US Pat. No.6,882,677 B2) in view of Bahl, et al. (U.S. Pub. No. 2003/0223469 B1) in view of Gwon, et al. (US Pub. No. 2003/0016655 A1) and further in view of Olkkonen, et al. (U.S. Patent No. 6,842,460 B1).

e) Claims 16-20 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Dehner, et al (US Pat. No.6,882,677 B2) in view of Bahl, et al. (U.S. Pub. No. 2003/0223469 B1).

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Claim 16 is independent and claims 17-20 are dependent on claim 16. Claim 16 defines a wireless neighborhood communications system and specifically recites as part of that system:

“a last hop node for defining a neighborhood cell;

a source mobile subscriber unit including a first source transceiver for communicating through wide area wireless network coverage outside of the neighborhood cell, and a second source transceiver for communicating through ad hoc wireless network coverage within the neighborhood cell;

a destination unit including a first destination transceiver for communicating through the wide area ~~conventional~~ wireless network coverage outside of the neighborhood cell, and a second destination transceiver for communicating through the ad hoc wireless network coverage within the neighborhood cell;

the last hop node further for causing the source mobile subscriber unit to communicate with the destination unit through the wide area ~~conventional~~ wireless network coverage when the source mobile subscriber unit is outside of the neighborhood cell, and for causing the source mobile subscriber unit to communicate with the destination unit through the ad hoc wireless network coverage when the source mobile subscriber unit is within the neighborhood cell.”

Referring to claim 16, the Examiner alleges that “Dehner et al. discloses a last hop node for defining a neighborhood cell (see col. 13, lines 45-51); the last hop node (see figure 1, wireless device 106, 118) further for causing the source mobile subscriber unit to communicate with the destination unit through the conventional wireless network coverage when the source mobile subscriber unit is outside of the neighborhood cell, and for causing the source mobile subscriber unit to communicate with the destination unit through ad hoc wireless network coverage when the source mobile subscriber unit is within the neighborhood cell (see col. 3, lines 40-67, The slave then completes a service access routine. Generally the master will transmit to a given slave, identified by an address assigned when a connection is established with that slave,

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during one time slot or frequency hop and receive from that same slave during the subsequent time slot. The master then transmits to another identified slave during the next times lot or hop and receives during the subsequent slot, etc. When a slave moves beyond the coverage area of the master that is attempting unsuccessfully to provide service by way of the connection, the connection will be dropped by the master and slave after the lapse of a time out period. The slave will enter a further inquiry, service discovery and access sequence in hopes of discovering service available from another piconet or master)."

Applicant respectfully notes that Dehner et al does not show wireless devices 106, 118 in FIG. 1 or any other figure. FIG. 1 shows a mobile device 111 and NAPs 103, 105, 107. Dehner et al does discuss a system using a frequency hopped air interface, e.g., Bluetooth, and does discuss as noted by the Examiner one or more manners used to secure service from a given master (NAP). It is unclear what the Examiner may be construing as a last hop node.

The Examiner concedes that "However, Dehner is silent to disclosing a source mobile subscriber unit including a first source transceiver for communicating through wide area wireless network coverage outside of the neighborhood cell, and a second source transceiver for communicating through ad hoc wireless network coverage within the neighborhood cell."

The Examiner then alleges that "Bahl discloses a source mobile subscriber unit (see figure 2, laptop computer 220) including a first source transceiver (see figure 2,220, IS mode) for communicating through wide area wireless network coverage outside of the neighborhood cell (see figure 2,280, ad hoc wireless network), and a second source transceiver (see figure 2, 220, AH "ad hoc" mode) for communicating through ad hoc wireless network coverage within the neighborhood cell (see page 4, [0028] [0029] [0030]); " Applicant respectfully disagrees as the

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laptop includes logical features that allow IS and AH operation all on an IEEE 802.11 system.
There is only one transceiver and that transceiver is only capable of local area network operation.

The Examiner's further alleges that the access point 215 of Bahl shows or suggests a destination unit including a first destination transceiver (see figure 2, 215, IS mode) for communicating through the conventional wireless network coverage outside of the neighborhood cell, and a second destination transceiver (see figure 2, 215, AH mode) for communicating through the ad hoc wireless network coverage within the neighborhood cell (see page 6, [0052]). This is simply erroneous, as the wireless transceiver implicitly within the access point always transmits/receives via the IS mode and always according to one protocol and always one local area network.

Thus the references cited by the Examiner taken in any combination fail to show the claimed last hop node and functionality of such a node and the claimed source and destination units as recited by claim 16 and claims dependent on claim 16. Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claims 16-20 under 35 U.S.C. 103(a) as being unpatentable over Dehner, et al (US Pat. No.6,882,677 B2) in view of Bahl, et al. (U.S. Pub. No. 2003/0223469 B1).

f) Claim 21 stands rejected under 35 U.S.C. 103(a) as being unpatentable over the combined system (Dehner-Bahl) in view of Razavilar, et al. (US Pat. No. 7,009,952 B1).

Claim 21 is dependent on claim 16 and claim 16 is believed to be allowable over these references and thus claim 21 at least by virtue of dependency should likewise be allowable.

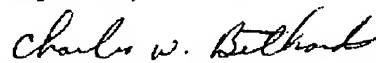
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Therefore, Applicant respectfully requests that the Examiner reconsider and withdraw the rejection of claim 21 under 35 U.S.C. 103(a) as being unpatentable over the combined system (Dehner-Bahl) in view of Razavilar, et al. (US Pat. No. 7,009,952 B1).

Accordingly, Applicant respectfully submits that the claims, as amended, clearly and patentably distinguish over the cited references of record and as such are to be deemed allowable. Such allowance is hereby earnestly and respectfully solicited at an early date. If the Examiner has any suggestions or comments or questions, calls are welcomed at the phone number below.

Although it is not anticipated that any fees are due or payable since this response is being timely filed within two months of the Final Office Action and no other fees appear to be due or payable, the Commissioner is hereby authorized to charge any fees that may be required or credit any overpayments to Deposit Account No. 50-3435. This response is being filed in a representative capacity by Charles W. Bethards, Registration number 36,453, in accordance with the provisions of 37 CFR 1.34.

Respectfully submitted,



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